FIG 1

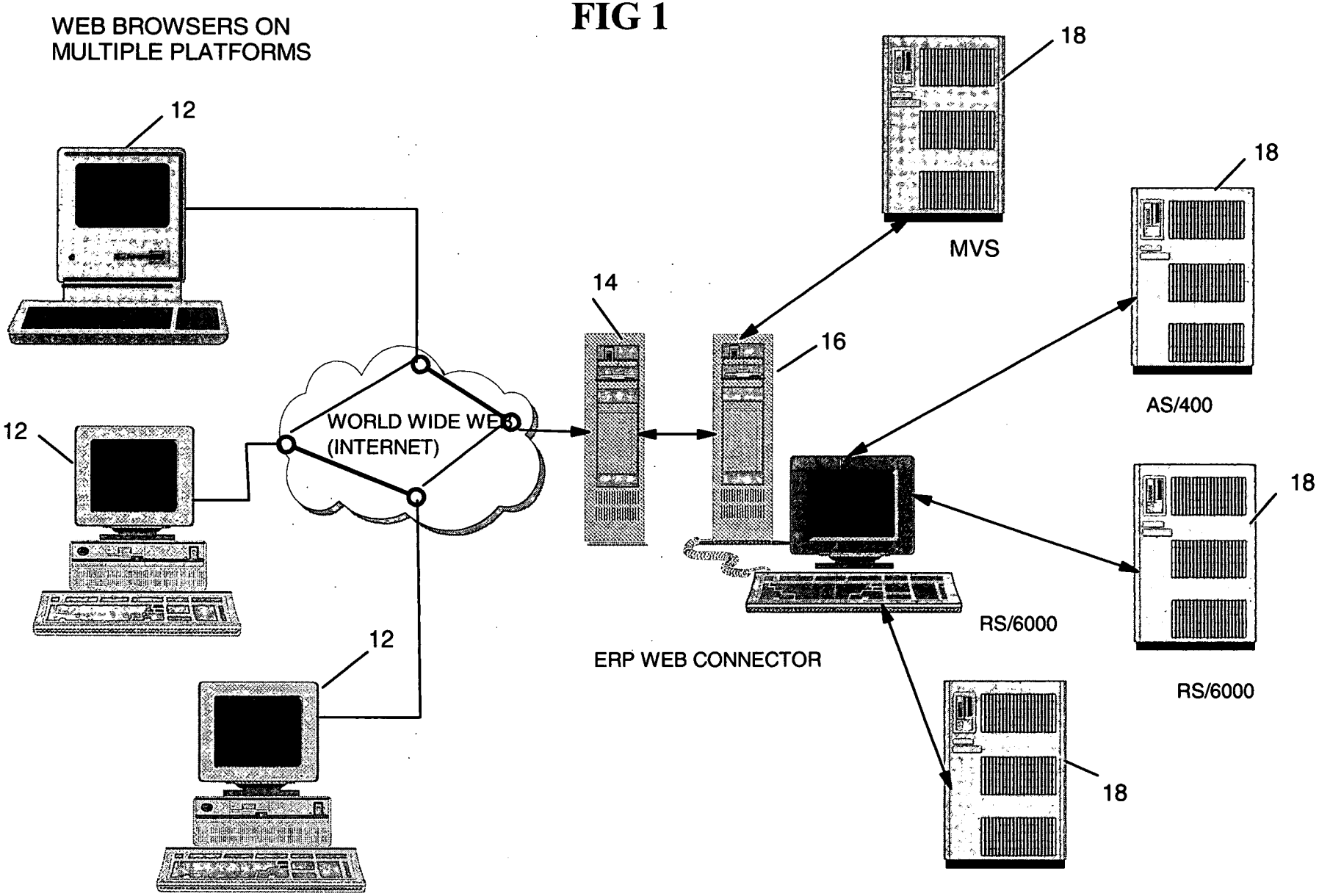

WEB BROWSERS ON
MULTIPLE PLATFORMS
12
12
12
WORLD WIDE WEB
(INTERNET)
14
16
18
MVS
18
AS/400
18
RS/6000
RS/6000
ERP WEB CONNECTOR
18

FIG. 2

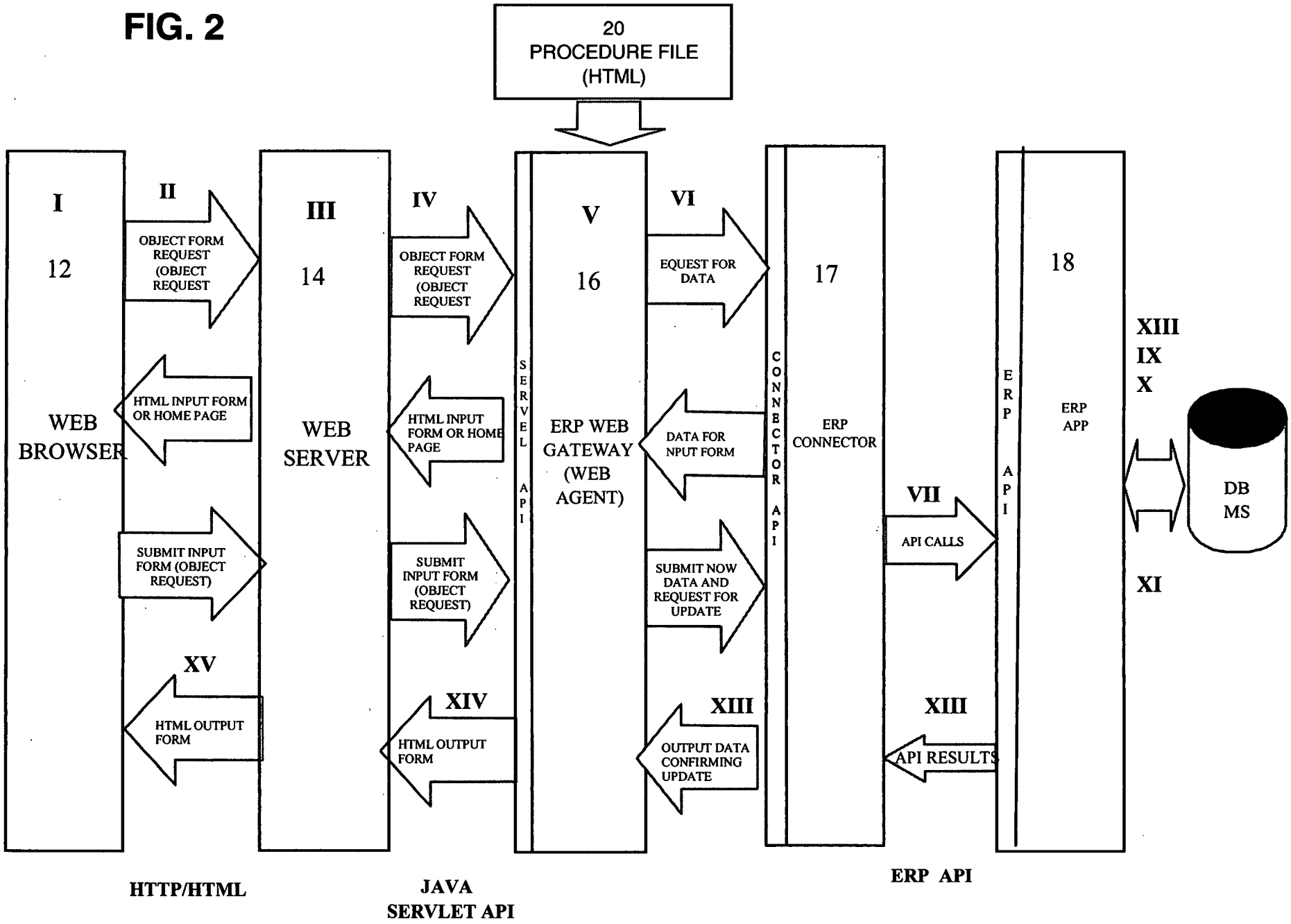

20
PROCEDURE FILE
(HTML)
I
12
WEB
BROWSER
II
OBJECT FORM
REQUEST
(OBJECT
REQUEST
III
14
WEB
SERVER
IV
OBJECT FORM
REQUEST
(OBJECT
REQUEST
SERVEL API
V
16
ERP WEB
GATEWAY
(WEB
AGENT)
VI
EQUEST FOR
DATA
CONNECTOR API
17
ERP
CONNECTOR
VII
API CALLS
ERP API
18
ERP
APP
XIII
IX
X
DB
MS
XI
HTML INPUT FORM
OR HOME PAGE
HTML INPUT
FORM OR HOME
PAGE
DATA FOR
NPUT FORM
SUBMIT INPUT
FORM (OBJECT
REQUEST)
SUBMIT
INPUT FORM
(OBJECT
REQUEST)
SUBMIT NOW
DATA AND
REQUEST FOR
UPDATE
XV
HTML OUTPUT
FORM
XIV
HTML OUTPUT
FORM
XIII
OUTPUT DATA
CONFIRMING
UPDATE
XIII
API RESULTS
HTTP/HTML
JAVA
SERVLET API
ERP API

FIG. 3a

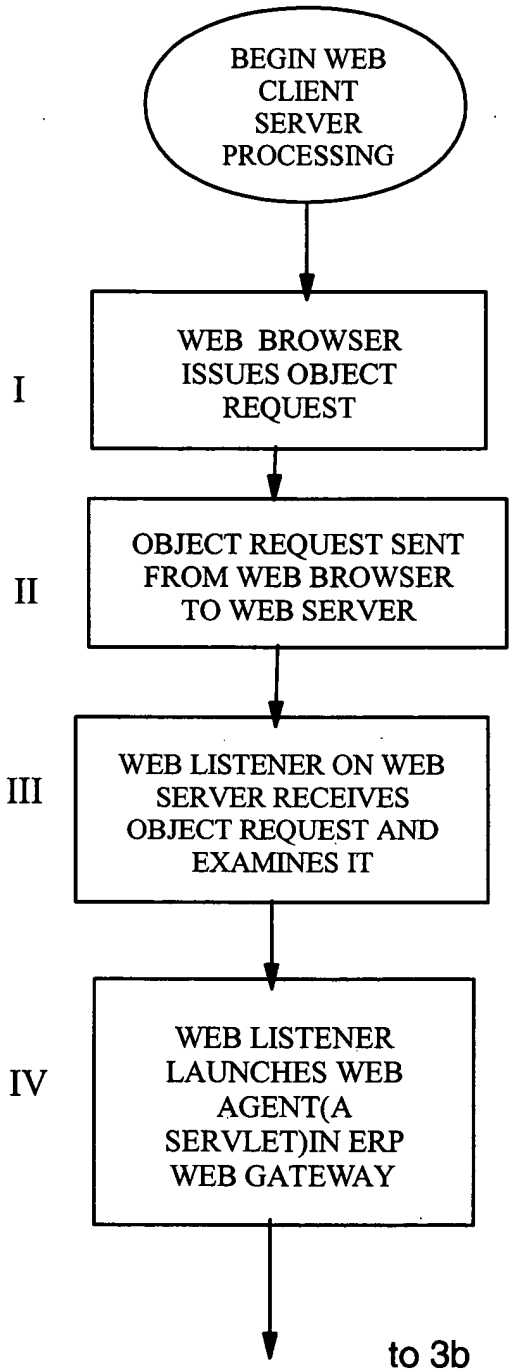

BEGIN WEB CLIENT SERVER PROCESSING
I
WEB BROWSER ISSUES OBJECT REQUEST
II
OBJECT REQUEST SENT FROM WEB BROWSER TO WEB SERVER
III
WEB LISTENER ON WEB SERVER RECEIVES OBJECT REQUEST AND EXAMINES IT
IV
WEB LISTENER LAUNCHES WEB AGENT(A SERVLET)IN ERP WEB GATEWAY
to 3b

FIG. 3b

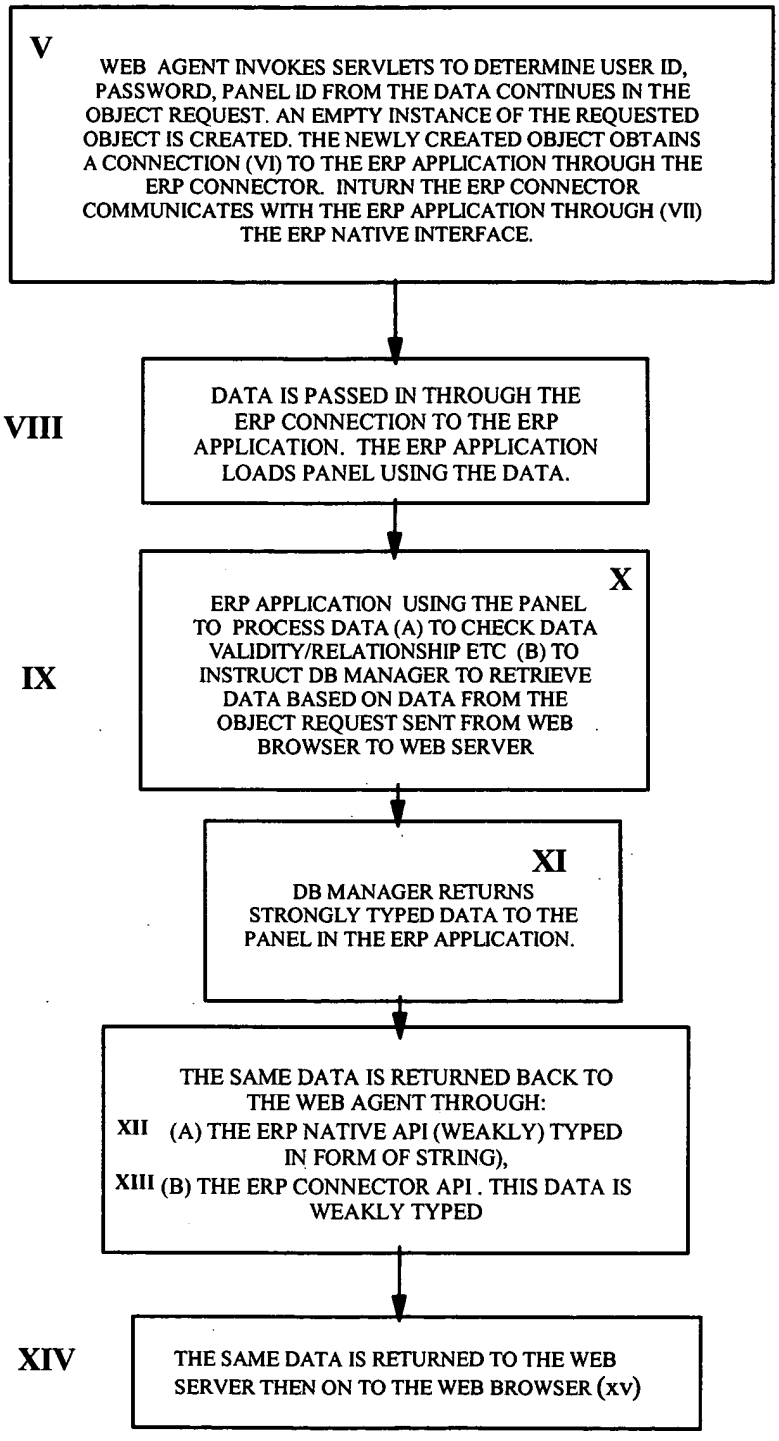

V
WEB AGENT INVOKES SERVLETS TO DETERMINE USER ID, PASSWORD, PANEL ID FROM THE DATA CONTINUES IN THE OBJECT REQUEST. AN EMPTY INSTANCE OF THE REQUESTED OBJECT IS CREATED. THE NEWLY CREATED OBJECT OBTAINS A CONNECTION (VI) TO THE ERP APPLICATION THROUGH THE ERP CONNECTOR. INTURN THE ERP CONNECTOR COMMUNICATES WITH THE ERP APPLICATION THROUGH (VII) THE ERP NATIVE INTERFACE.
VIII
DATA IS PASSED IN THROUGH THE ERP CONNECTION TO THE ERP APPLICATION. THE ERP APPLICATION LOADS PANEL USING THE DATA.
IX
X
ERP APPLICATION USING THE PANEL TO PROCESS DATA (A) TO CHECK DATA VALIDITY/RELATIONSHIP ETC (B) TO INSTRUCT DB MANAGER TO RETRIEVE DATA BASED ON DATA FROM THE OBJECT REQUEST SENT FROM WEB BROWSER TO WEB SERVER
XI
DB MANAGER RETURNS STRONGLY TYPED DATA TO THE PANEL IN THE ERP APPLICATION.
THE SAME DATA IS RETURNED BACK TO THE WEB AGENT THROUGH:
XII (A) THE ERP NATIVE API (WEAKLY) TYPED IN FORM OF STRING),
XIII (B) THE ERP CONNECTOR API . THIS DATA IS WEAKLY TYPED
XIV
THE SAME DATA IS RETURNED TO THE WEB SERVER THEN ON TO THE WEB BROWSER (xv)

FIG. 5

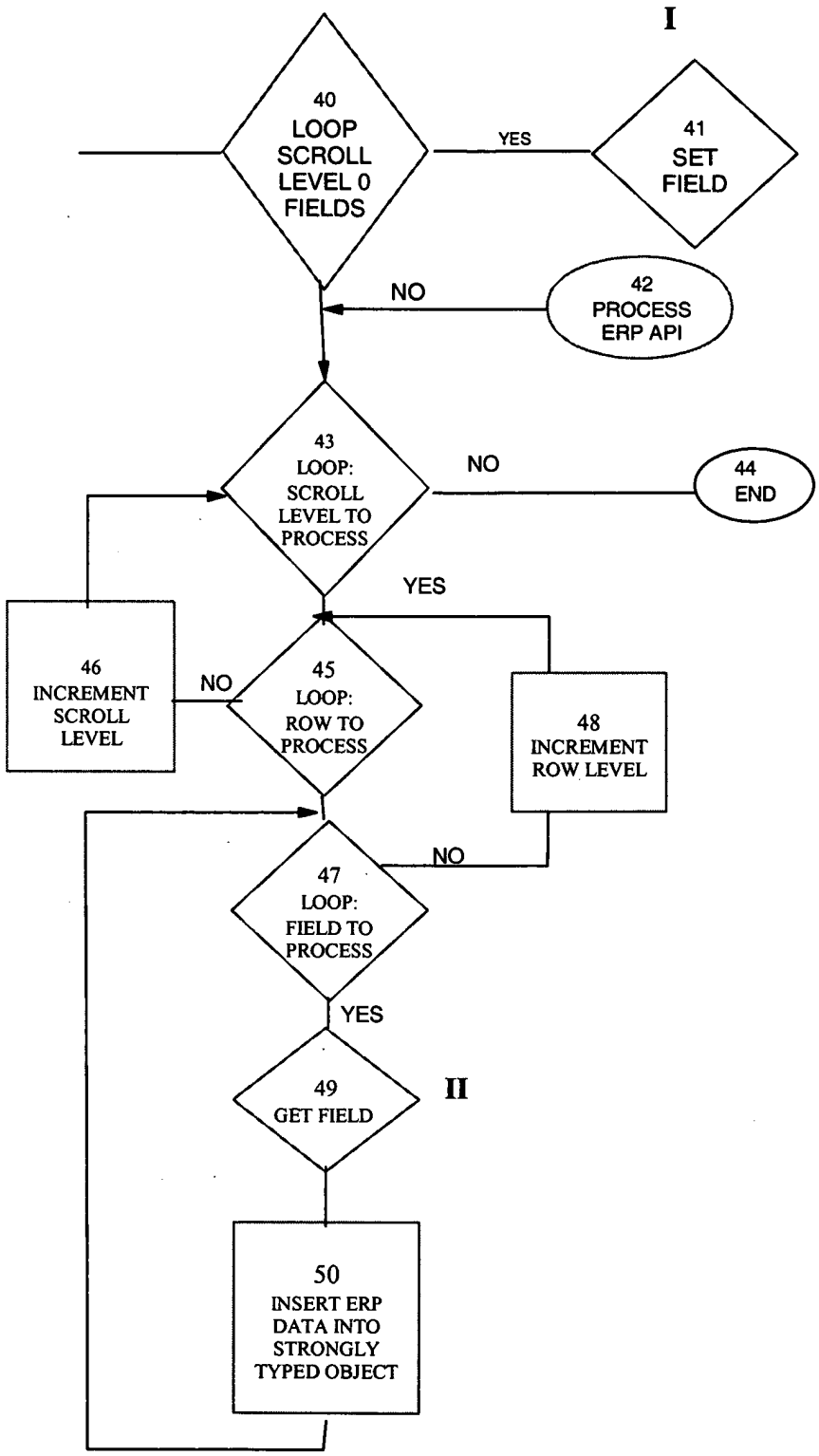
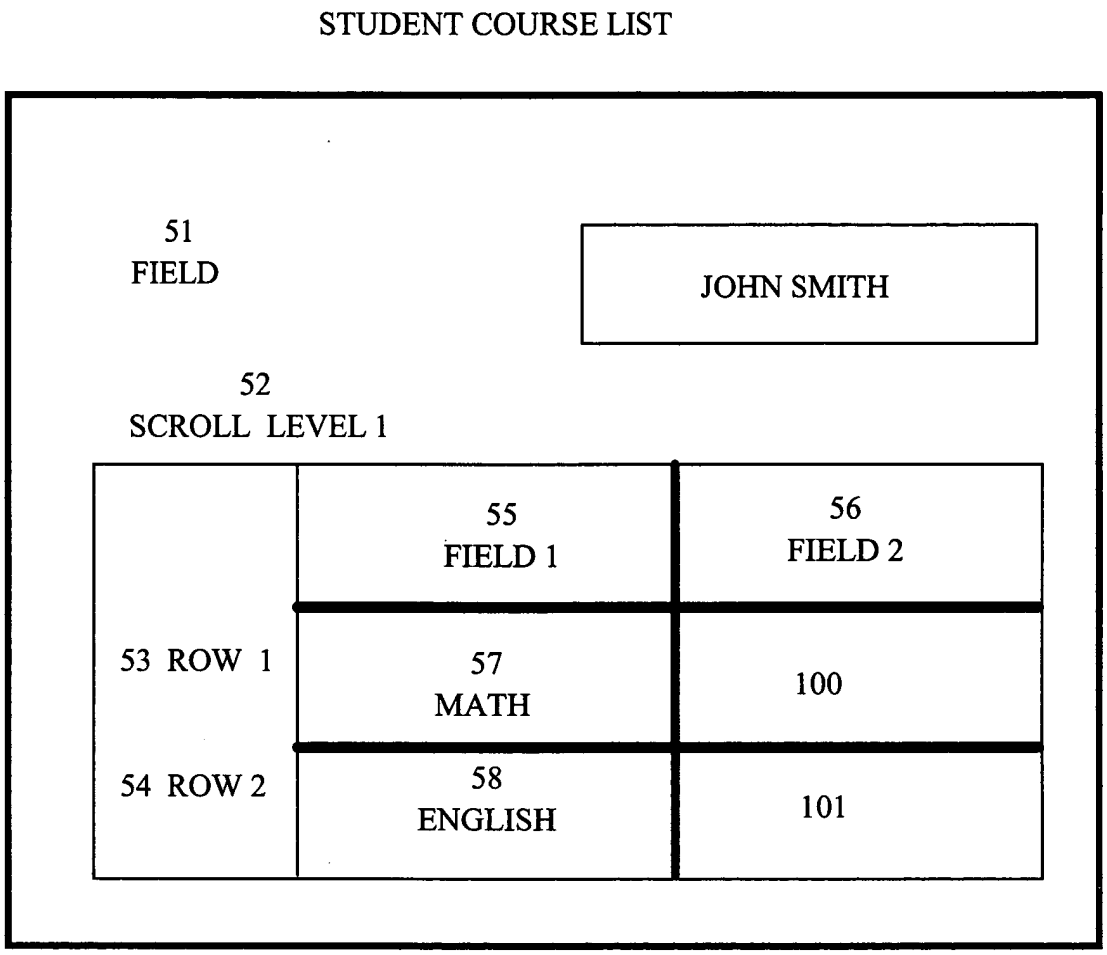
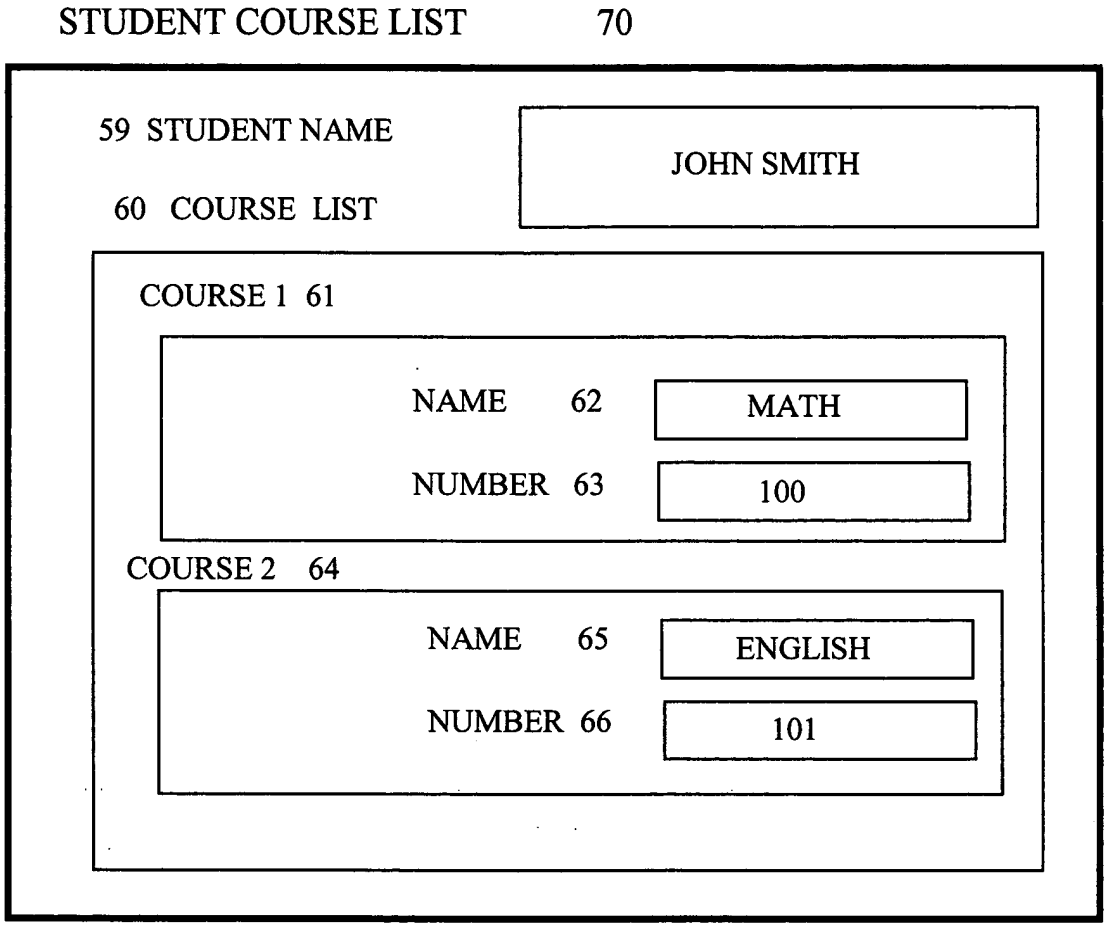

I
40
LOOP
SCROLL
LEVEL 0
FIELDS
YES
41
SET
FIELD
NO
42
PROCESS
ERP API
43
LOOP:
SCROLL
LEVEL TO
PROCESS
NO
44
END
YES
46
INCREMENT
SCROLL
LEVEL
NO
45
LOOP:
ROW TO
PROCESS
48
INCREMENT
ROW LEVEL
NO
47
LOOP:
FIELD TO
PROCESS
YES
49
GET FIELD
II
50
INSERT ERP
DATA INTO
STRONGLY
TYPED OBJECT

FIG. 6



WEEKLY TYPED

FIG. 7



STRONGLY TYPED

FIG. 8

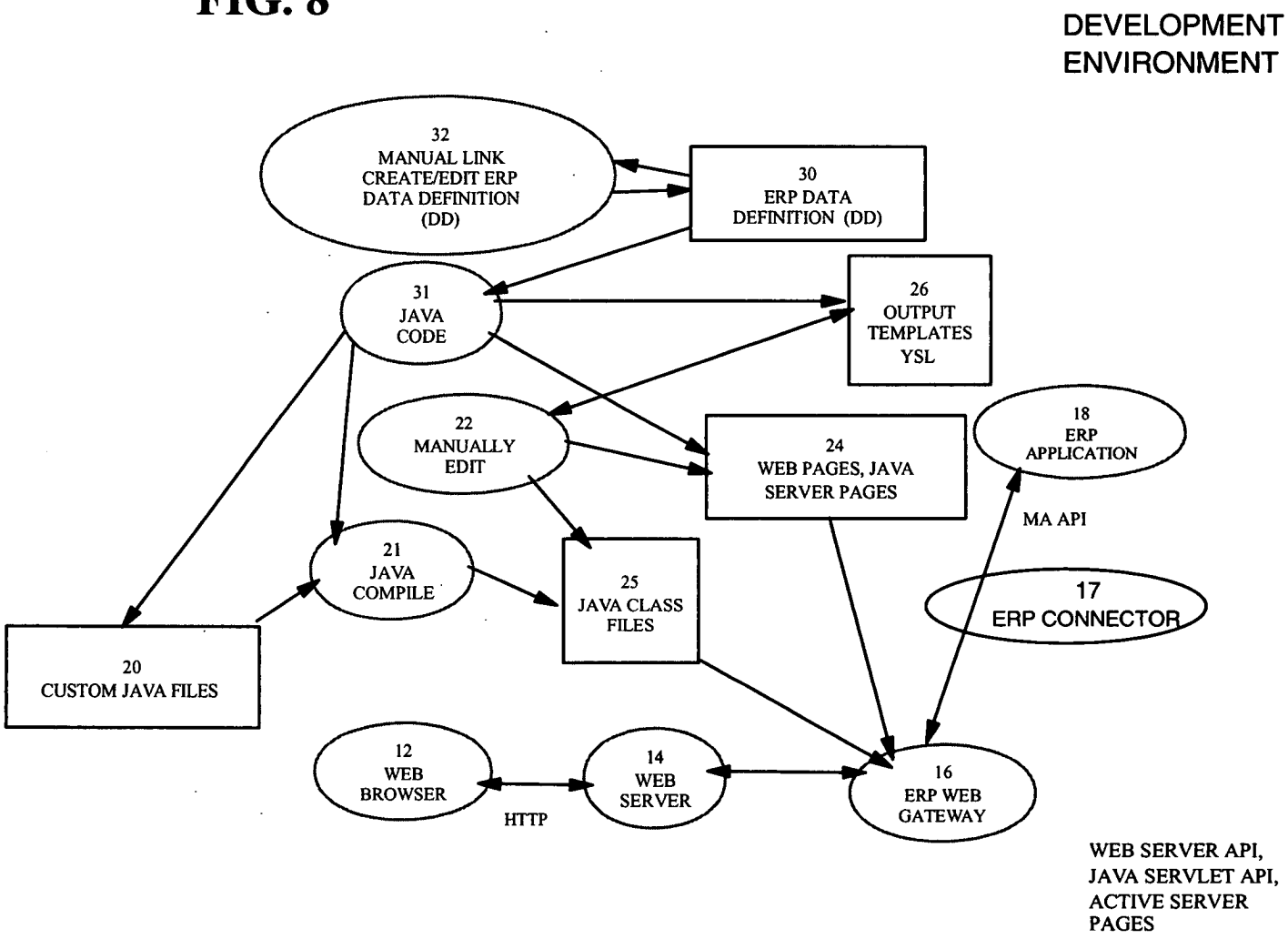
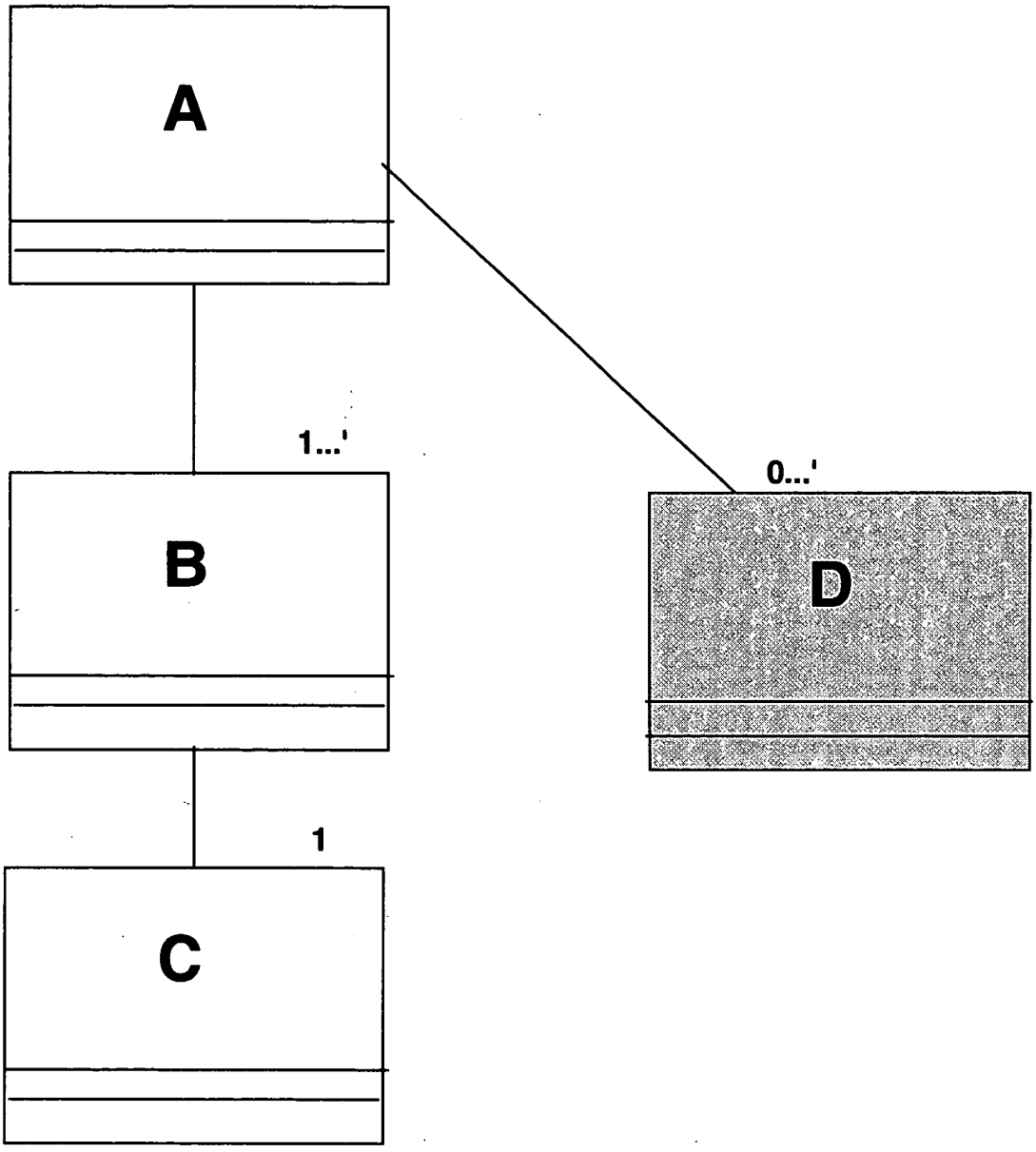

DEVELOPMENT ENVIRONMENT
32 MANUAL LINK CREATE/EDIT ERP DATA DEFINITION (DD)
30 ERP DATA DEFINITION (DD)
31 JAVA CODE
26 OUTPUT TEMPLATES YSL
22 MANUALLY EDIT
24 WEB PAGES, JAVA SERVER PAGES
18 ERP APPLICATION
MA API
21 JAVA COMPILE
25 JAVA CLASS FILES
17 ERP CONNECTOR
20 CUSTOM JAVA FILES
12 WEB BROWSER
HTTP
14 WEB SERVER
16 ERP WEB GATEWAY
WEB SERVER API, JAVA SERVLET API, ACTIVE SERVER PAGES

FIG. 9

DEFINING A SUB-GRAPH OF DATA OBJECTS